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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,024	09/03/2002	Kari Holopainen	FORSAL-36	5860
36528	7590	03/04/2005	EXAMINER	
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			NGUYEN, JIMMY T	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,024

Applicant(s)

HOLOPAINEN ET AL.

Examiner

Jimmy T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-18,20-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-18,20-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on December 15, 2004 has been entered and considered and an action on the merits follows.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**calender having three intermediate shoe rolls**” (claims 33, lines 3-5 and line 9); “**a non-rotating central shaft**” (claim 33, line 6); “**a row of shell loading shoes** being supported on the central shaft” (claim 33, lines 7-8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The amendment filed on December 15, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: New claim 33 calls for three intermediate calender rolls are shoe rolls (lines 3-5 and 9), the original specification does not provide any support for a calender having three intermediate shoe rolls.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 33 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

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the inventor(s), at the time the application was filed, had possession of the claimed invention.

See similar discussion in the objection to the specification set forth above.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding lines 9-14, it is unclear of what structural inter-relationship exists between the two intermediate calender rolls and other rolls (i.e. the top, bottom, and intermediate rolls) as claimed in line 1-8, in order to calender paper web. Further, it is unclear of what structural inter-relationship exists between another calender roll or another shoe roll (line 13) and other rolls in the calender.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 16, 20-21 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirvonen (US 5,938,895), in view of Ehrola et al. (hereinafter "Ehrola") (US 5,897,476).

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Regarding claims 14, 16, and 20-21, the claims are rejected for substantially the same reason as set forth in the last Office action.

Regarding new claim 33, as best as can be understood, Hirvonen discloses a calender having a plurality of calender rolls arranged one upon the other (see fig. 2), an intermediate shoe roll (30) is located between a top (26) and a bottom (21) calender rolls; the intermediate shoe roll comprises an outer shell (31) and a non-rotating center shaft (33) and the shell rotating around the central shaft (col. 5, lines 30-32); a row of internal shell loading means (34). Hirvonen discloses the outer shell is being displaceable in relation to the central shaft in order to separate the intermediate shoe roll (see fig. 2) from a nip forming contact with another roll (25). Hirvonen discloses the outer shell of the shoe roll is of composite material (col. 5, lines 21-22). Hirvonen does not disclose the outer shell of the shoe roll is being formed by the specific type of composite material as claimed. However, the patent to Ehrola, teaches that it is old and well known in the paper web rolling art to provide a nip press having a nip form between a shoe roll (10) and another roll (30), wherein the shoe roll having an outer shell (11) made of a continuous-fibre reinforced composite material (see abstract). Ehrola teaches the outer shell with this type of composite material in order to provide the outer shell more rigidity in the direction of the circumference than in the axial direction (see abstract and col. 1, lines 56-64). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Hirvonen's shoe roll with the type of outer shell having a continuous-fibre reinforced composite material, as taught by Ehrola, in order to improve the stability of shape of the outer shells in the direction of the circumference (col. 1, lines 56-64).

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirvonen and Ehrola et al., as applied to claim 14 above, further in view of van Haag (US 5,419,242). The claims are rejected for substantially the same reason as set forth in the last Office action.

Claims 14-15, 17-18, 24-29, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckers (US 6,305,280), in view of Ehrola et al. (hereinafter "Ehrola") (US 5,897,476).

Becker discloses a calender comprising: a frame (16); a first roll stack having a top shoe roll (4) mounted to the frame, a first press roll (7) beneath the top roll, a first intermediate roll (8) beneath the first press roll; a second roll stack having a second intermediate roll (9) beneath the first intermediate roll, a second press roll (10) beneath the second intermediate roll, a bottom shoe roll (13) beneath the second press roll, wherein the first and the second intermediate rolls are shoe rolls that have outer shells (14), a row of shell-loading shoe means (18) for loading the first intermediate roll against the first press roll and for loading the second intermediate roll against the second press roll, or alternatively to load the first intermediate roll against the second intermediate roll (fig. 1). The first and the second intermediate rolls are fixedly mounted on the frame (figs. 1-3). Becker further discloses that the first and the second intermediate rolls can be separated from contact with rolls of their own roll stack into nip contact with each other (col. 5, lines 27-19 and col. 6, lines 4-12). Beckers does not disclose the outer shells of the shoe rolls are being formed by the specific type of composite material as claimed. However, the patent to Ehrola, teaches that it is old and well known in the paper web rolling art to provide nip press

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having a nip form between a shoe roll (10) and another shoe roll (30), wherein the shoe roll having an outer shell (11) made of a continuous-fibre reinforced composite material, wherein the continuous-fibre reinforced composite material includes reinforced epoxy (col. 3, line 58). Ehrola teaches the outer shell with this type of composite material in order to provide the outer shell more rigidity in the direction of the circumference than in the axial direction (see abstract and col. 1, lines 56-64). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Beckers's shoe rolls with the type of outer shell having a continuous-fibre reinforced composite material, as taught by Ehrola, in order to improve the stability of shape of the outer shells in the direction of the circumference (col. 1, lines 56-64).

Response to Arguments

Applicant's arguments filed December 15, 2004 have been fully considered but they are not persuasive.

Applicant argues that there is no indications for the type of shoe roll in the Ehrola reference could be used in a calender of the Beckers and the Hirvonen references. With respect to Applicant's assertions, this argument is not found persuasive because Beckers and Hirvonen disclose a calender having a roll nip press between a shoe roll and another roll for treating paper web, Ehrola also discloses that the shoe roll could be used as a nip roll in a roll nip press for treating paper web (col. 1, line 25). Ehrola teaches the type of shoe roll having an outer shell (11) made of a continuous-fibre reinforced composite material in order to maintain the shape of the outer shell (see col. 1, lines 56-64). Because Beckers, Hirvonen and Ehrola are disclosed a shoe roll in a roll nip press for treating paper web, it is obvious for one skill in the art to provide either

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Beckers or Hirvonen's shoe roll with the type of outer shell, as taught by Ehrola, in order to maintain the shape of the outer shell of their shoe rolls.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

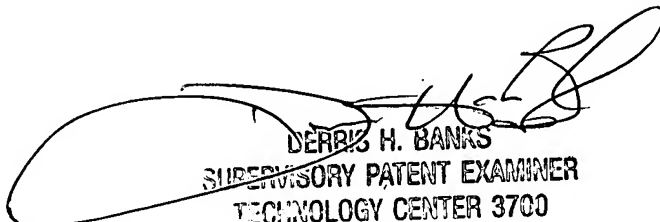
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Nguyen whose telephone number is (571) 272-4520. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272- 4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTNguyen
March 01, 2005



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